

REMARKS:

This application has been carefully studied and amended in view of the Office Action dated December 22, 2004. Reconsideration of that action is requested in view of the following.

The indication of allowability of claims 30-34 is noted with appreciation.

Reconsideration is respectfully requested of the rejection of claims 1-18 and 35-36 under 35 USC 112 and over the prior art.

The rejected claims and in particular claims 1-18 are generally patterned after corresponding claims in parent U.S. Patent No. 6,372,334. The claims in the parent '334 patent, however, are directed to the reinforcement laminate in its condition wherein the various foam layers have already been activated and thereby the laminate is in its use condition. The intent of claims 1-18 and claims 35-36 in the present application is to provide patent protection with regard to the laminate in the pre-use condition in which it would be sold prior to activation of the first and second layers. As such, the laminate as claimed in this application represents an article of manufacture which has utility in that it corresponds to the condition of the laminate as a manufacturer might sell the laminate for use in, for example, reinforcing a vehicle part. The claimed laminate thus corresponds

to an article of manufacture in the form it might commercially take.

PARAGRAPH 5 OF OFFICE ACTION

Reconsideration is respectfully requested of the rejection of claims 1-18 and 35-36 under 35 U.S.C. 112 as based on a disclosure which is not enabling. In making this rejection Examiner Vo indicated that "The presence of a compliant layer and a rigid layer in the tri-laminate stiffener are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure". To support this position Examiner Vo cites In re Mayhew.

The reliance on Mayhew is misplaced. Mayhew disclosed a method of producing a corrosion-resistant, iron-zinc alloy coating on a steel strip and products thereof. In the disclosed method a steel strip is heated to 1000°F or greater and passed into a molten bath of spelter of about 99% zinc containing up to 0.30% aluminum. The bath is maintained at approximately 900-950°F or higher by heat from the strip and other sources as needed. The iron-zinc alloy is formed on the strip while it is submerged. After the strip passes around a sink roll, it travels into a cooled zone containing coolers which control the temperature of the zone between 800-860°F. The cooled zone terminates the alloying process.

The appellant in Mayhew attempted to claim methods which failed to recite the use of a cooling zone at the point where the strip left the spelter bath, and this was not enabled by the disclosure. The appellant, however, strenuously argued that the cooling bath was optional. The court, in contrast, held that the cooling bath and its location in the method were not optional, but rather were essential to the invention, and therefore rejected the claims as non-enabled.

Therefore, Mayhew stands for the proposition that claims failing to recite a necessary element of the invention fail for lack of an enabling disclosure.

A case that cites Mayhew for just this proposition is Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313 (Fed. Cir. 2003). In Amgen, the court distinguished its facts from Mayhew by stating, "[In Mayhew], however, the method claims omitted a step without which the invention as claimed was wholly inoperative (meaning it simply would not work and could not produce the claimed product.) Here, the lack of a limitation directed to the exogenous expression vector in the product claims is not a failure to describe . . . a necessary element of the claimed EPO."

The present application is clearly distinguished from Mayhew in a number of ways. First of all, all of the rejected claims in the present application are product claims directed to a physical

member and not method claims that are missing a critical element to practice the method. Additionally, there is ample support in the present specification that teaches what is recited in claim 1, i.e., the pre-cured reinforcement laminate. In contrast, there was no text in the Mayhew application that taught that the cooling zone at the point where the strip left the spelter bath was optional.

For example, page 1, lines 8-11 of the present application states, "In accordance with another aspect of this invention the reinforcing laminate for a part or substrate is made from a stiffener member or backing having an expandable foam secured thereto." (Emphasis added.) "Expandable" means pre-cured. See page 13, lines 18-20 of the present application which states, "When the polymer is activated, the foam expands and would move backing layer 14 outwardly further away from substrate 10." Activated in this context means cured, and the polymer can be cured by heat or chemically cured.

Additionally, page 5, lines 5-17 of the present application discloses, "The application of the polymer 2 which can be a sheet thermoset polymer can be by using a wallpaper sheet type technique as shown in Figure 1 or can be sprayed on as shown in Figure 2. In the practice shown in Figure 1 a fiberglass backing 3 covers the polymer 2. After the polymer 2 is applied it is then

heat cured in an oven. . . In the alternative of Figure 2 a single polymer layer is applied without a backing. Where a backing is used the backing can be fiberglass cloth, metal screen, or foil. Generally, the polymer layer would have a thickness of 0.020 to 0.100 inches thick." (Emphasis added).

Further, page 10, lines 15-20 of the present application states that "Laminate 12 comprises a backing 14 and an intimately bonded expandable foam layer 16. Foam layer 16 may be a single rigid structure foam layer. . .or may be of two layer form as illustrated, for example, in Figure 3." The emphasized texts represent teachings in the instant application of the reinforcement laminate recited in claim 1 before the heat curing step.

Thus, since all of the rejected claims in the instant application are product claims and not method claims that are missing a critical element to practice the method, and the present specification teaches the laminate before curing; the instant application is clearly distinguishable from Mayhew.

PARAGRAPH 7 OF OFFICE ACTION

Reconsideration is respectfully requested of the rejection of claims 1-18 and 35-36 under 35 USC 112 second paragraph as being indefinite. Paragraph 7 of the Office Action states "The

phrase 'capable upon activation of becoming rigid reinforcement foam indicates that the action of becoming a rigid reinforcement foam is a future action which may be done but is not required to be done." The Examiner's reasoning is apparently that the second foamable layer absorbs the shrinkage strains due to the heat curing step of the second foamable layer and cooling of the substrate and it is not clear that the second foamable layer is able to absorb the shrinkage strains before foaming activation because the shrinkage strains from the rigid layer is transferred to the compliant layer only after foaming activation.

The Examiner's indefiniteness rejection is inapposite to the long established case law on this issue. In Application of Venezia, 530 F.2d 956 (C.C.P.A. 1976), the appellant's invention was a splice connector having interrelated parts adapted to be assembled in the field to provide a splice connection between a pair of high voltage shielded electric cables.

On appeal before the court were claims drawn to a splice connector 'kit' consisting of the parts used in making the splice in their unassembled condition.

Claim 31, in relevant part, was representative of the claims on appeal:

31. A splice connector kit having component parts
capable of being assembled in the field at the
terminus of high voltage shielded electrical

cables for providing a splice connection between first and second such cables, said cables each having a conductor surrounded by an insulating jacket within a conductive shield wherein a portion of the conductive shield is removed to expose the insulating jacket and a portion of the insulating jacket is re-moved to expose the conductor at the terminus of the cable, the kit comprising the combination of. . . .(Emphasis added).

The court concluded that the claims do define the metes and bounds of the claimed invention with a reasonable degree of precision and particularity, and that the claims were definite as required by the second paragraph of section 112. The court said that the claims precisely defined a group of interrelated parts. These interrelated parts may or may not be later assembled to form a completed connector. But what may or may not happen in the future is not a part of the claimed invention. The claimed invention included present structural limitations on each part. The structural limitations were defined by how the parts were to be interconnected in the final assembly, if assembled.

Furthermore, the court stated, "We see nothing wrong in defining the structures of the components of the completed

connector assembly in terms of . . . the attributes they must possess, in the completed assembly. More particularly, we find nothing indefinite in these claims. One skilled in the art would have no difficulty determining whether or not a particular collection of components infringed the collection of interrelated components defined by these claims. . . Moreover, although the claims before us contain some language which can be labeled 'conditional,' this language, rather than describing activities which may or may not occur, serves to precisely define present structural attributes of interrelated component parts of the 'kit,' such that a later assembly of the 'kit' of parts may be effected."

See also In re Swinehart, 439 F.2d 210, 212 (C.C.P.A. 1971) which states that an applicant is free to recite features of an apparatus either structurally or functionally. Further, see Rhone-Poulenc Agrochime S.A. v. Biagro Western Sales, Inc., 35 USPQ2d 1203, 1205 (E.D. Calif. 1995), which pointed out that "a term is only indefinite if one skilled in the relevant art would not understand what is claimed even when the claim is read in light of the specification."

Clearly, claim 1 of the instant application is not indefinite because the phrases, "capable upon activation of becoming a rigid reinforcement foam," and "capable upon activation of becoming a compliant foam," are present structural

limitations of the recited "first layer of foamable material," and "second layer of foamable material," respectively. Not all materials can produce or have the required capabilities. Being capable of doing what the claim recites is a structural feature which distinguishes the claimed materials from materials lacking that capability.

PARAGRAPHS 9, 11 AND 12 OF OFFICE ACTION

It is respectfully submitted that claims 1, 3-14, 18 and 36 are not anticipated by Nomura (Paragraph 9 of Office Action) and are not obvious over Nomura (Paragraph 11 of Office Action) and not obvious over Nomura in view of Daniel (Paragraph 12 of Office Action). Apparently, the basis of this rejection is that because Examiner Vo considered the "capability features" of the first and second layers to be indefinite, those features regarding what the first and second layers were capable of becoming upon activation were ignored or treated as not being limitations. As such, the examiner construed the Nomura patent as being pertinent to the claimed invention in its disclosure of two layers of polyethylene foams.

As discussed above the recitations in parent claim 1 of the first layer being capable of "becoming a rigid reinforcement foam" and of the second layer being capable of "becoming a compliant foam" and further of "functioning for absorbing

shrinkage strains due to heat cure of said second foamable layer and pulling of the substrate" are, in fact, structural features. In that regard, it is not sufficient that the laminate include a foam layer. Rather, that foam layer must be of such a nature that it has the capability of being what is recited in the claim. Merely being a foam layer without that capability does not meet the appropriate feature of the claim. To further emphasize the nature of the first and second layers, claim 1 has now been amended to also refer to the first and second layers in terms of means plus function. Thus, claim 1 recites "said first layer thereby comprising means for becoming a rigid reinforcement foam upon activation thereof" and recites "said second layer thereby comprising means for becoming a compliant foam upon activation thereof". In addition, claim 1 has been amended to define "said second foamable layer comprising means for absorbing shrinkage strains due to heat cure of said second foamable layer and cooling of the substrate".

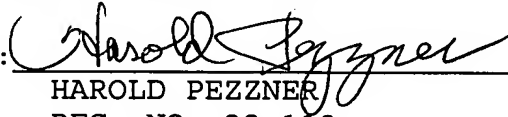
The two layers of polyethylene foam in the Nomura panel are part of a structure which is intended "to provide a highly acoustical auto ceiling panel which...can well absorb the noise in the vehicle." (Col. 1, lines 40-43) The benefits of providing such a panel are summarized in col. 3, line 50 to col. 4, line 2 of Nomura which includes: 1) having "sound absorbing effect"; 2) having "a pleasing look"; 3) facilitating "thermal fusion"; and

4) ensuring "a good effect of sound absorption can be yielded without obstruction of through holes". There is no disclosure in Nomura of the two layers of polyethylene foam being intended for and being capable of having the defined purposes and functions of the two layers of foamable material recited in claim 1 of the present application. Accordingly, there is no disclosure or suggestion that the two polyethylene layers of Nomura have the capability which are the structural limitations for the layers in claim 1 or could comprise the stated means plus function requirements of the layers in claim 1. As such, claim 1 and its dependent claims structurally distinguish over Nomura.

In view of the above remarks and amendments this application should be passed to issue.

Respectfully Submitted,

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